

Trigonometry

SOH CAH TOA

$\sin \theta = \frac{o}{h}$
 $\cos \theta = \frac{a}{h}$
 $\tan \theta = \frac{o}{a}$

$a^2 + b^2 = c^2$

Apr 6-1:43 PM

State the 3 primary trig ratios for θ

SOH CAH TOA

$\sin \theta = \frac{4}{5}$
 $\cos \theta = \frac{3}{5}$
 $\tan \theta = \frac{4}{3}$

$\sin \theta = 0.8000$
 $\theta = \sin^{-1}(0.8000)$ - Trig Ratios (4 decimals)
 $\theta = 53.1^\circ$
 $\theta = 53$ (round to the nearest degree)

Apr 6-1:48 PM

Evaluate to four decimal places

$\sin 55^\circ = 0.8192$
 $\tan 125^\circ = -1.4281$ - obtuse triangle

$\sin \angle \cos = 0$ and 1
 \tan = only primary trig ratio that can be above 1

Apr 6-1:55 PM

Solve for x (sides to one decimal place angles to nearest degree)

SOH CAH TOA

$\sin \theta = \frac{17}{26}$
 $\cos \theta = \frac{17}{26}$
 $\cos \theta = 0.6538$
 $\theta = \cos^{-1}(0.6538)$
 $\theta = 49^\circ$

$\sin 49^\circ = \frac{o}{h}$
 $\sin 49^\circ = \frac{x}{26}$
 $26 \sin 49^\circ = x$
 $26(0.7547) = x$
 $x = 19.6$

$a^2 + b^2 = c^2$
 $17^2 + b^2 = 26^2$
 $b^2 = 26^2 - 17^2$
 $b^2 = 676 - 289$
 $b^2 = 387$
 $b = 19.7$

Apr 6-2:03 PM

36)

SOH CAH TOA

$\tan 15^\circ = \frac{b}{10}$
 $10 \tan 15^\circ = b$
 $10(0.2679) = b$
 $2.7 = b$

Apr 6-2:49 PM

SOH CAH TOA

$\sin \theta = \frac{o}{h}$
 $\sin \theta = \frac{4.7}{7.3}$
 $\sin \theta = 0.6438$
 $\theta = \sin^{-1}(0.6438)$
 $\theta = 40.1^\circ$
 $\theta = 40^\circ$

Apr 6-2:12 PM

p 260-262
q. 1-6, 7, & 10

Apr 6-2:15 PM